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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/004,552	12/05/2001	Gary Jennings	BR8669	7086

7590 02/01/2005

The Black & Decker Corporation
701 East Joppa Road -TW199
Towson, MD 21286

EXAMINER

SAETHER, FLEMMING

ART UNIT	PAPER NUMBER
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3677

DATE MAILED: 02/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/004,552

Applicant(s)

JENNINGS ET AL.

Examiner

Flemming Saether

Art Unit

3677

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 September 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 13-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 13-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Specification

The title of the invention continues to be not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. The examiner suggests, for example: --A blind rivet having multiple radial indentations--.

Claim Rejections - 35 USC § 102

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Gossmann (US 5,496,140). Gossmann discloses a rivet comprising a mandrel (3) having a frangible portion (6) and a shell (2) having a flange (10) with a first (12) and second (11) sets of indentations along the shell spaced from the flange. Each of the indentations being non-continuous and non-secant shaped when viewed in a lateral direction transverse to the axial direction as in Fig. 1.

Claim 1 is rejected under 35 U.S.C. 102(a) as being anticipated by Smith (EPO 1 030 069). Smith discloses a rivet comprising a mandrel (4) having a frangible portion (not labeled) and a shell (2) having a flange (6) with a first (12) and second (14) sets of indentations along the shell spaced from the flange. As seen in Fig. 2, each of the indentations being non-continuous, as they are separated by members 16, and non-secant shaped.

Claim Rejections - 35 USC § 103

Claims 2-9 and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gossmann or Smith as applied to claim 1 above, and further in view of Lacey (US 4,958,971). Lacey teaches a rivet including a third indentation. At the time the invention was made, it would have been obvious for one of ordinary skill in the art to provide Gossmann or Smith with a third set of indentations as taught in Lacey in order to better control the deformation characteristics of the rivet for overall superior performance. The specific dimensions would have been recognized depending upon the particular use of the rivet. Also, the rivet of modified Gossmann or Smith would be capable of use in combination with the workpiece components as claimed.

Claims 1-9 and 13-15 are alternatively rejected under 35 U.S.C. 103(a) as being unpatentable over Lacey (US 4,958,971) in view of Gossmann (US 5,469,140). Lacey discloses a rivet comprising a mandrel (13) having a frangible portion (19) and a shell (11) having a flange (16) with a first (27), second (28) and third (29) indentations along the shell spaced from the flange. Lacey discloses the indentations to be non-secant shaped however they are not non-continuous. Gossmann discloses a rivet having a shell with sets of indentations (11, 12) wherein the sets are non-continuous. At the time the invention was made, it would have been obvious for one of ordinary skill in the art to form the indentations of Lacey in to non-continuous sets as disclosed in Gossmann in order to provide for a higher strength rivet connection. As discussed in Grossmann's

Summary of the Invention the non-continuous sets of indentations lead to less material attenuation and thus a stronger rivet connection.

Response to Remarks

Applicant's arguments regarding "non-annular" are moot since the claims have been amended to remove "non-annular".

Applicant argues that Gossmann does not disclose the indentation as being "non-secant" shaped since Fig. 2 shows a classic secant line. In response, the examiner agrees that the indentations are shown to be a secant in radial cross section as seen in Fig. 2. However, the claims do not specific as to orientation of the non-secant shape and as such in the axial cross section in Fig. 1, the indentation are shown to be "non-secant". For that matter, there is an infinite number of other cross sectional planes which would show a non-secant shape. The examiner suggests the applicant claim the shape of the segments as to what they are and rather than what they are not. For example as described in applicants remarks "individual arcs or segments of a ring".

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

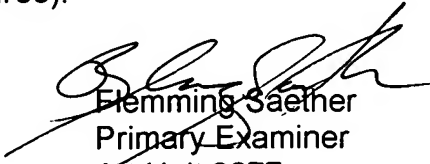
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Flemming Saether whose telephone number is 703-308-0182. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Swann can be reached on 703-306-4115. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Flemming Saether
Primary Examiner
Art Unit 3677